

New or little known Australian Carabidae in the Frey Museum (Col.)

by B. P. Moore (Canberra)

Further collecting by Mr. H. Demarz, in central Australia and northern Queensland*), has provided many carabids additional to those reported in the first paper**) of this series and once again, it seems desirable to list data for previously known species as well as for the new species that are now on hand. Indeed, some of the 'known' species barely qualify for this category, for they appear never to have been recorded since their original description, with only the vaguest indications of provenance, many years ago. The present material thus affords the first opportunity to place such species firmly 'on the map' and it is therefore a special pleasure to thank Dr. Frey for allowing me to make this study and to retain duplicates for continued reference, here.

Scaritinae

Carenum viridescens Sloane

Western Australia: Southern Cross (IX. 60).

Conopterum pertenuae Sloane

Western Australia: Kalgoorlie (1964).

Broschinae

Adotela frenchi Sloane

Western Australia: Southern Cross (1964).

Gnathoxys punctipennis Macl.

Western Australia: Southern Cross (VIII. 59; IX. 60). The two specimens of this characteristic little species show no trace of elytral striae, whereas in the type form from South Australia, these striae are discernible, though obsolescent.

*) for details of itinerary see Ent. Arb. Mus. Frey. 13, 1962, pp. 623-634.

**) Ent. Arb. Mus. Frey, 14, 1963, pp. 435-444.

Apotominae

Apotomus australis Cast.

Northern Territory: Humpty Doo (XII. 57).

Bembidiinae

Tachys impressipennis Mots. (*sinuaticollis* Sl.)

Northern Territory: Humpty Doo (XII. 57).

Tachys convexus Macl.

Northern Territory: Mainoro (I. 58).

Psydrinae

Amblytelus leai Sloane

Western Australia: Karridale (XI. 59).

Dystrichothorax bipunctatus Blackb.

N. Queensland: Herberton (I. 62). A fine series of specimens.

Mecyclothorax fortis Sloane

Western Australia: Kenwick (1964).

Pterostichinae

Morion crassipes Sloane

N. Queensland: Innisfail (XII. 61); Atherton district (I. 62).

Morion novae-hollandiae Cast.

N. Queensland: Atherton district (XII. 61–I. 62).

Morion longicolle Macl.

New South Wales: Glen Innes (I. 62).

Morion longipenne Putz.

N. Queensland: Atherton district (XII. 61 I. 62).

Cratogaster sulcatum Blanch.

N. Queensland: Gilberton (I. 62).

Loxandrus rufilabris Cast.

Northern Territory: Katherine (XII. 57); Beswick (I. 58).

Castelnaudia setosiceps Sloane

N. Queensland: Innisfail (XI.–XII. 61).

Sarticus iriditinctus Chaud.

Western Australia: Southern Cross (IX. 60).

Prosopogmus foveipennis Macl.

N. Queensland: Innisfail (XI.-XII. 61); Mareeba (XII. 61- I. 62).

Pedimorphus elongatus Sloane

Western Australia: Kenwick (1964).

Colpodes habilis Sloane

N. Queensland: Atherton district (XII. 61-I. 62). Seven specimens which appear to provide the first Australian record for this widespread New Guinea species.

Colpodes lafertei Montr.

N. Queensland: Atherton district (XII. 61-I. 62).

Chlaeniinae*Chlaenius australis* Dej.

Western Australia: Southern Cross (IX. 60); New South Wales: Nyngan district (II. 62).

Chlaenius ophonoides Fairm.

New South Wales: Sydney district (Nikitin, 1958).

Oodinae*Oodes denisonensis* Cast.

N. Queensland: Cairns (no date).

Oodes inornatus Cast.

Western Australia: Kenwick (1964).

Coptocarpus gibbus Chaud.

Western Australia: Moore River (VII. 59).

Anatrichus australasiae Chaud.

New South Wales: Nyngan district (II. 62).

Harpalinae*Gnathaphanus impressipennis* Cast.

Queensland: Mt. Molloy (I. 62).

Gnathaphanus latus Sloane

New South Wales: White Cliffs (II. 62). This little known species was described originally from nearby Wilcannia and thus seems to be associated with the Darling River basin.

Diaphoromerus inaequalipennis Cast.

Western Australia: Wanneroo district (IX. 59).

Cenogmus castelnaui Csiki (*rotundicollis* Cast.)

Western Australia: Southern Cross (VIII. 59); New South Wales: Sydney district (Nikitin, 1958).

Cenogmus interioris Cast.

Western Australia: Norseman (I. 61).

Phorticosomus felix Schaum

Western Australia: Southern Cross (VIII. 59), Byro (IV. 62); New South Wales: White Cliffs (II. 62).

Phorticosomus macleayi Sloane

Northern Territory: Beswick (I. 55).

Phorticosomus grandis Cast.

Western Australia: Shaw River (V-VI. 55); New South Wales: White Cliffs (II. 62).

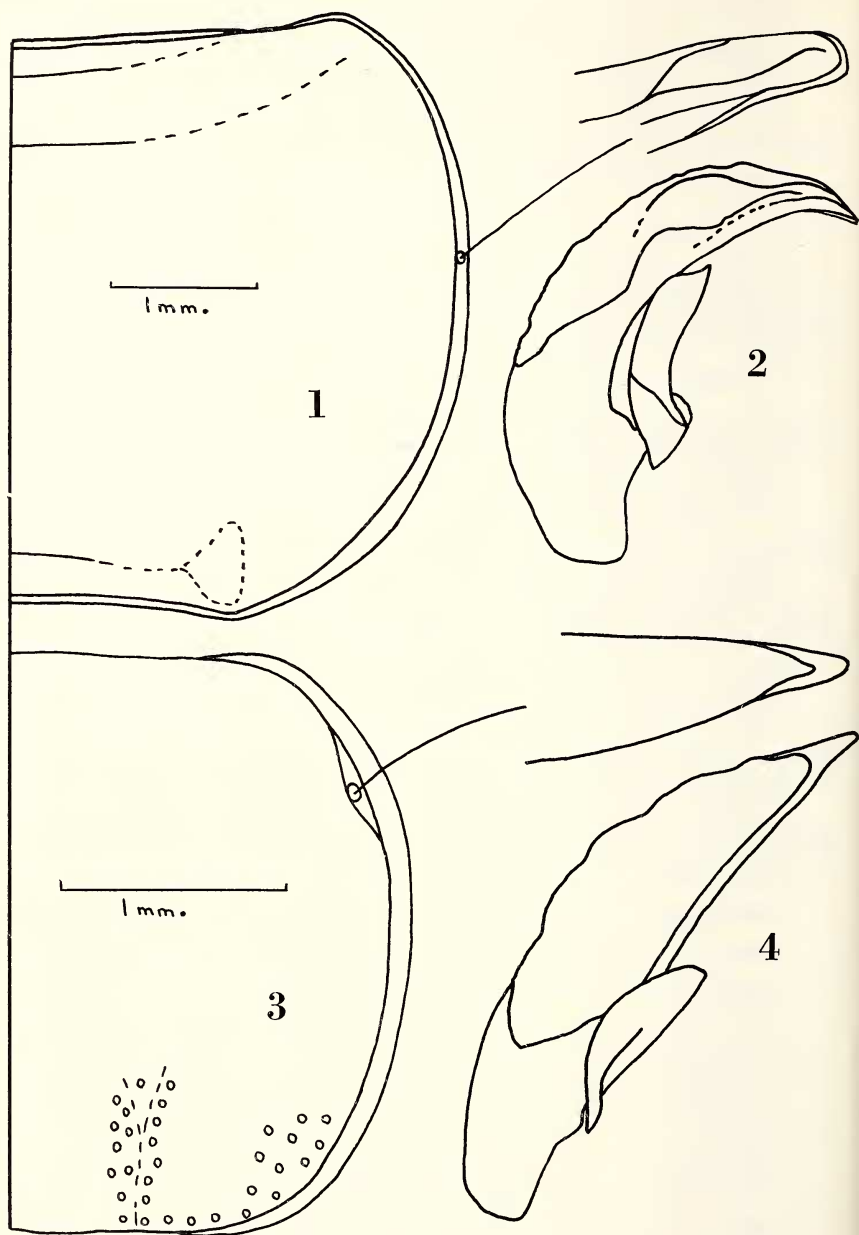
Phorticosomus zabroides Sloane

N. Queensland: Mt. Molloy (I. 62).

Phorticosomus rotundatus sp. n. (Figs. 1-2)

Form stout, the appendages short. Almost entirely black but palpi and basal segment of antennae piceous.

Head broad, not large (for the genus); front strongly bi-impressed; eyes small but rather prominent, inclosed behind; mandibles short, strongly curved; labrum emarginate, sexsetose; antennae short, reaching a little beyond the pronotal marginal setae. Pronotum transverse, with anterior and posterior margins concave; sides strongly rounded throughout; anterior angles subprominent; posterior angles rounded off, scarcely apparent; prosternum setose, bi-impressed between coxae. Elytra broad, fully striate, the apices lightly sinuate; striae unpunctured, becoming deeper towards apex; scutellary striae vestigial, in the second intervals; interstices lightly convex on disc, more so towards apex; humeri rounded; metepisterna smooth, elongate, strongly bordered. Legs short; anterior tibiae with two or three small lateral teeth, the apical tooth



Figs. 1-4: Pronota (right side) and aedeagi in left lateral and dorsal views:
 1-2, *Phorticosomus rotundatus* sp. n.; 3-4, *Lecanomerus limbatus* sp. n.

well marked; male anterior tarsi unmodified; hind trochanters short, reniform, setose; marginal fringe of hind femora comprising 11–12 long setae. Aedeagus (Fig. 2) rather stout; median lobe regularly curved in lateral view, apex blunt, without a disc.

Length, 17 mm.; max. width, 6,7 mm.

Type (male): Northern Territory, Beswick, I. 58 (H. Demarz), in the Frey Museum. Paratype (male) from nearby Katherine, in my collection.

This species differs from all those previously described, and of similar large size, by its completely rounded pronotal hindangles and its deep black colour.

Hypharpax vilis Blackb.

Western Australia: Perth (XII. 53), Southern Cross (VIII. 59), Mayfield (VIII. 59), Regan's Ford (X. 59), Kenwick (1960–61), Kalgoorlie (1964).

Lecanomerus limbatus sp. n. (Figs. 3–4)

Form compact; fully winged. Mostly piceous-black; mouthparts and abdomen brownish; appendages and elytral margins testaceous.

Head small, with well-marked frontal impressions; eyes convex and prominent, not inclosed behind; mandibles short, acutely pointed; labrum subrectangular, sexsetose, anterior margin slightly emarginate; antennae rather short, with two basal segments glabrous. Pronotum transverse, subrectangular, the sides lightly rounded from base to apex; anterior and posterior angles rounded off; basal impressions shallow, with a few scattered punctures. Elytra elongate, subparallel, fully striate; striae impunctate; no scutellary striae; intervals nearly flat; third intervals with a small setiferous pore at apical third, set against the second stria; marginal channel and intervals 8–9 pale throughout, intervals 1–7 pale at apex only, the dark colour extending farthest on 1–2; humeri rounded; metepisterna elongate. Legs short but slender; tarsi glabrous above; male anterior and intermediate tarsi lightly expanded and spongiose beneath. Apex of abdomen bisetose in male, quadrisetose in female. Aedeagus (Fig. 4) rather stout; apex of median lobe somewhat acuminate; orifice of internal sac occupying most of the dorsum.

Length, 4.5–5.0 mm., max. width, 1.7–2.0 mm.

Type (male) and four paratypes (both sexes): N. Queensland, Innisfail, 28. XI.–13. XII. 61 (H. Demarz) and one paratype (female), Mareeba, 25. XII. 61–7. I. 62 (H. Demarz), in the Frey Museum. Three paratypes (same data as for type) in my collection.

This little species is one of a group of pale-margined *Lecanomerus* (all of them apparently undescribed) that frequent the rain-forests of northern Queensland. Others occur in New Guinea and New Caledonia. Relationships within this complex are not yet fully worked out but the shape of the pronotum and the form of the aedeagus appear to be characteristic.

Stenolophus piceus Guer.

Western Australia: Kenwick (1964); New South Wales: Sydney district (Nikitin 1958), Nyngan district (II. 62); Queensland: Kuranda, Cairns and Mareeba (XII. 61).

Stenolophus vestigialis Erichs. (*dingo* Cast.)

N. Queensland: Kuranda, Cairns (XII. 61), Herberton, Rockhampton (I. 62).

Euthenaris comes Sloane

Western Australia: Kenwick (1964).

Euthenaris promptus Erichs.

New South Wales: Sydney district (Nikitin, 1958).

Coleolissus papua Darl.

N. Queensland: Innisfail (XI.–XII. 61).

The single female specimen is assigned provisionally to Professor Darlington's New Guinea species, although it may ultimately prove to represent a new form. The Australian National Insect Collection at Canberra contains a closely related male specimen (taken on Cape York by Darlington and kindly presented by him). Together these two examples afford the first record, from Australia, of this essentially Oriental genus (and, incidentally, of the tribe Harpalini, *sensu stricto*) but the question of their specific identity must await the availability of further material.

Tetragonoderinae

Sarothrocrepis dimidiata Macl.

N. Queensland: Mareeba (XII. 61).

Lebiinae

Coptodera australis Chaud.

N. Queensland: Atherton district (XII. 61–I. 62).

Agonochila biguttata Chaud.

Western Australia: Northam (VII. 53), Kenwick (1964).

Agonochila ruficollis Sloane

Western Australia: Karridale (II. 59), Kenwick (1964).

Agonochila curtula Erichs.

Western Australia; Karridale (IX. 59), Northcliffe (XII. 50).

Philophloeus truncatus Sloane

Western Australia: Kenwick (1964).

Demetrida (= *Xanthopoea*) *longicollis* Macl. (*ferruginea* Chaud.)

N. Queensland: Manango (XI. 61), Atherton district, Innisfail (XI.-XII. 61).

Demetrida cylindricollis Blackb.

N. Queensland: Mareeba (XII. 61-I. 62), Innisfail (XI.-XII. 61).

Demetrida suturalis Newm.

Victoria: Wangaratta (XI. 61).

Demetrida picipennis Chaud.

New South Wales: Cooma (no date).

Demetrida vittata Dej.

Western Australia: Hamelin Bay (I. 54).

Demetrida metallica sp. n. (Fig. 5)

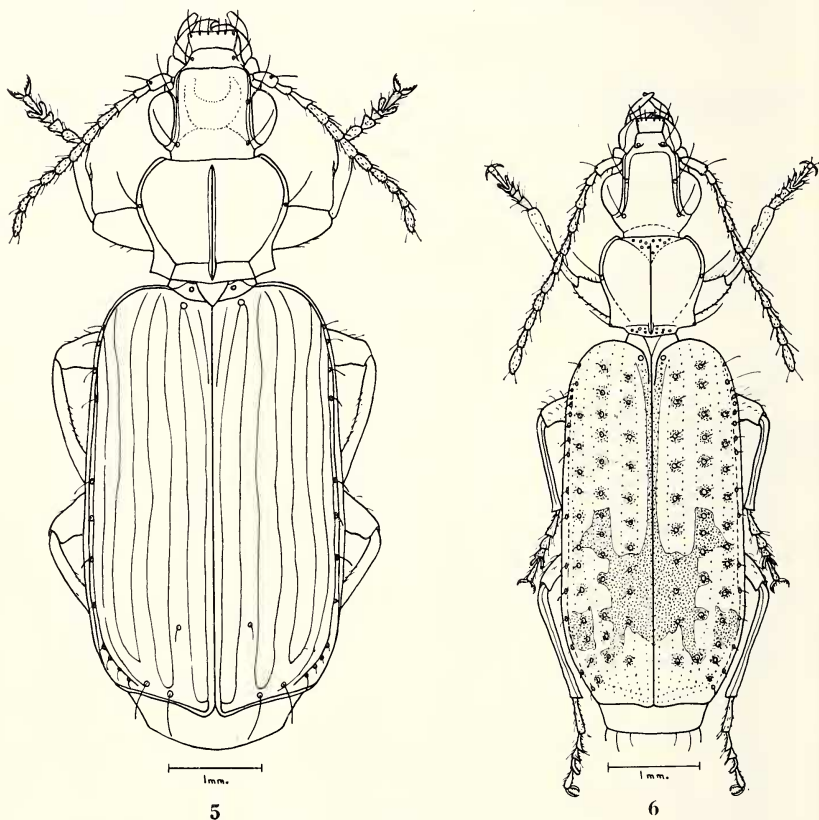
Form elongate, subparallel; fully winged. Head black; pronotum with bluish reflections; elytra bright metallic blue with golden-green margins; underside and appendages mostly black.

Head of average size (for the genus); frontal impressions feeble; eyes large and prominent, lightly inclosed behind; mandibles short and broad, with a sharp tip; labrum rectangular, sexsetose; antennae short, with three basal segments glabrous. Pronotum transverse, cordate; median line strongly impressed; only the anterior marginal seta present; anterior angles lightly indicated; posterior angles rectangular and prominent. Elytra glabrous, elongate, widest about apical third, fully striate; striae punctulate; all intervals punctate, the third intervals bearing one (in type) to four (in paratype) small setiferous pores; apical truncature unarmed; metepisterna elongate. Legs rather stout; tarsi setose above; male anterior tarsi with three basal segments slightly dilatate and squamose beneath; claws strongly pectinate. Apex of abdomen quadri-setose in both sexes. Aedeagus slender, the median lobe tubular, with a long, pointed apex.

Length, 7.8–8.2 mm.; max. width, 2.8–3.0 mm.

Type (male): N. Queensland, Mt. Molloy, 7–10. I. 62 (H. Demarz), in the Frey Museum. Paratype (female): Northern Territory, Beswick, I. 58 (H. Demarz) in my collection.

This is a very characteristic insect, easily distinguished amongst Australian forms by its metallic colour. A similarly coloured (undescribed) species exists in New Guinea but the insect is broader and the elytra are prominently mucronate.



Figs. 5–6: 5. *Demetrida metallica* sp. n., 6. *D. variolosa* sp. n.

Demetrida variolosa sp. n. (Fig. 6)

Form elongate, parallel; fully winged. Head, pronotum and underside mostly piceous; elytra testaceous, with the suture, discal pores and a postmedian fascia piceous; appendages testaceous to fuscous.

Head rather small, punctate on vertex and with feeble frontal impressions; eyes prominent, lightly inclosed behind; mandibles short; antennae rather long, with two basal segments glabrous, the third sparsely pubescent. Pronotum subquadrate, cordate, widest close to middle; median line lightly impressed; base, apex and margins punctate; anterior angles not prominent; posterior angles rectangular, rather prominent; anterior and posterior marginal setae present. Elytra elongate, parallel, fully striate; striae punctate; intervals finely setigero-punctate; third, fifth, seventh and ninth intervals with numerous, large, dark-coloured setiferous pores; apical truncature sinuate. Legs rather short; tarsi setose above; male anterior tarsi unmodified; claws strongly pectinate. Apex of abdomen quadrisetose in male, sexsetose in female. Median lobe of aedeagus with a long, pointed apex.

Length, 6–6.7 mm.; max. width, 1.8–2.1 mm.

Type (female): New South Wales, White Cliffs 6–7. II. 62 (H. Demarz) in the Frey Museum. Paratype (immature male): West Australia, Kenwick, 1960–61 (H. Demarz) in my collection.

Another very distinct species; the presence of dark-coloured setigerous punctures on all primary intervals, except the first, will separate it from related forms.

Microlestes atrifasciatus Sloane

N. Queensland: Innisfail (XI.–XII. 61).

Thorough study of this and related Australian species may well show them to belong to another genus.

Trigonothrops pescotti Oke (*comb. nov.*)

Western Australia: Northcliffe (XII. 59).

This species was described originally*) in the genus *Xanthophoea* but an examination of the types (in the National Museum of Victoria), some years ago, convinced me that it really belongs to *Trigonothrops* Macleay. The rostrate head, smooth tarsi and strongly securiform labial palpi (in the male) all point to such an assignment.

Celaenephes parallelus S.-G.

N. Queensland: Innisfail (XI.–XII. 61).

Lebia melanota Chaud.

Queensland: Mackay district (I. 62).

*) Mem. Nat. Mus. Victoria, 17, 1951, p. 19.

Lebia papuensis Macl.

N. Queensland: Innisfail (XI.–XII. 61).

Catascopus laticollis Macl.

N. Queensland: Atherton district (XII. 61–I. 62).

Stricklandia nigra Sloane

N. Queensland: Atherton district (XII. 61–I. 62); a fine series of six examples.

Anomotarus humeralis Sloane

N. Queensland: Mareeba (XII. 61–I. 62).

Anomotarus crudelis Newm.

Western Australia: Southern Cross (IX. 60), Wooramel River (IV. 61).

Anomotarus variegatus sp. n. (Fig. 7)

Form elongate, rather depressed; fully winged. Head and pronotum bronze-black; elytra testaceous, with a broad postmedian fascia and irregular baso-sutural markings bronze-piceous; legs testaceous; antennae and palpi brownish; underside mostly piceous but meso- and metasterna and abdominal sterna lighter about the midline.

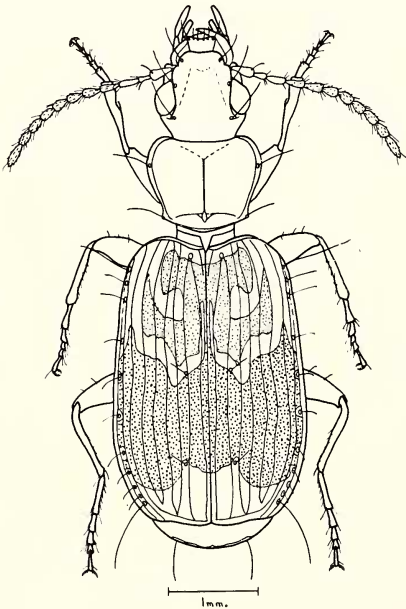


Fig. 7: *Anomotarus variegatus* sp. n.

Head of average size (for the genus), with weak frontal impressions; eyes rather prominent, inclosed behind; mandibles short, sharply poin-

ted; labrum lightly emarginate, sexsetose; antennae with three basal segments glabrous; labial palpi securiform in male, fusiformi in female. Pronotum slightly transverse, cordate; anterior angles rounded; posterior angles well marked and prominent. Elytra elongate, widest about posterior third, fully striate, the striae unpunctured; scutellary striae long, on the first intervals; third intervals with two discal pores. Legs rather slender; male anterior tarsi with three basal segments slightly expanded, squamose beneath; claws pectinate. Apex of abdomen bisetose in male, quadrisetose in female.

Length, 5.3–5.9 mm.: max. width, 1.9–2.1 mm.

Type (male) and paratype (female): N. Queensland, Kuranda, 4. XII. 61 (H. Demarz); paratype (male), Mareeba, and paratype (female), Cairns (both from the same expedition as the type), in the Frey Museum. Two paratypes (male and female), with the same data as the type, in my collection.

This prettily marked species most closely resembles *A. crudelis* Newm. of the Australian fauna but the latter is a larger, more robust insect (length about 7 mm.), with a dull black head and light rufous pronotum. The dark pattern of the elytra is less dissected in *crudelis* than in the new species. *A. ornatus* Louw. (of the Moluccas), which is unknown to me in nature, appears to belong to the same species group but the original description*) indicates a more transverse pronotum and more discretely spotted elytral pattern than occur in either Australian species.

Nototarus freyi sp. n. (Fig. 8)

Form elongate-oval, depressed; brachypterous. Mostly dark brown, but basal gibbosity of pronotum, margins of elytra and appendages lighter. Head rather large, longitudinally wrinkled, punctate; eyes not at all prominent, strongly inclosed behind; mandibles short and broad; antennae short, with two basal segments glabrous; labial palpi securiform in male, fusiform in female. Pronotum subquadrate, cordate; apex wider than base; disc transversely wrinkled; base somewhat lobate, with a rugose median gibbosity; all four margins punctate; anterior angles weak; posterior angles dentiform, subprominent; anterior and posterior marginal setae present. Elytra glabrous, elongate-oval, widest about middle, fully but lightly striate; striae minutely crenulate; intervals almost flat, strongly shagreened and dull; margins strongly explanate and lighter in colour; no discal pores. Legs slender; tarsi glabrous above;

*) Treubia, 23, 1956, pp. 237–238.

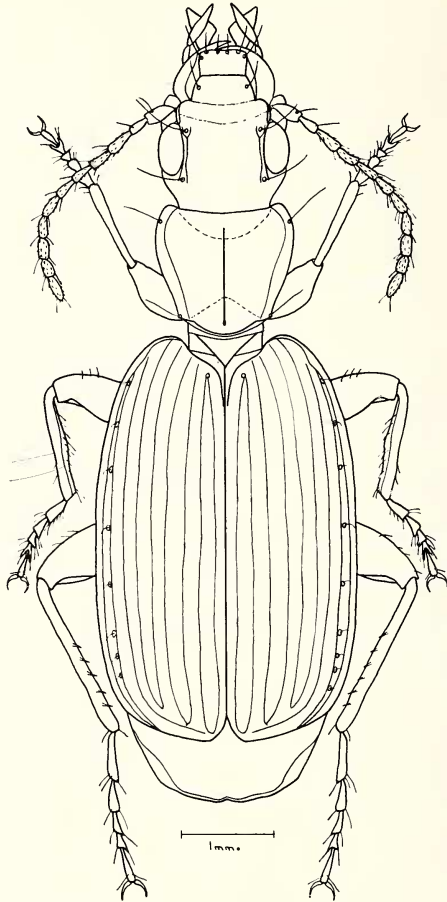


Fig. 8: *Nototarus freyi* sp. n.

male anterior tarsi slightly expanded and squamose beneath; claws simple. Apex of male abdomen bisetose. Aedeagus stout; apex of median lobe shortly pointed.

Length, 8.4–9.0 mm., max. width, 2.9–3.0 mm.

Type (male) and paratype (male): Western Australia, Lake Deborah, VII. 59 (H. Demarz), also paratype (male): Western Australia, Southern Cross, VIII. 59 (H. Demarz), all in the Frey Museum. Paratype (male) with same data as type, in my collection.

This species belongs to the central body of the genus (i. e. excluding *angusticollis* Sl. and *magnus* Moore), where it may be distinguished by its large size, characteristic build and paler brown colouring.

Dryptinae

Desera smaragdina Chaud.

N. Queensland: Mt. Molloy (I. 62).

Helluoninae

Helluo costatus Bon.

New South Wales: Armidale district (II. 62).

Neohelluo angulicollis Sloane

N. Queensland: Gilberton (I. 62).

A fine series of nine specimens includes one male with marked hypertrophy of the mandibles and anterior pronotal angles.

Ametroglossus ater Macl.

N. Queensland, Mareeba (XII. 61).

Gigadema sulcatum Macl.

N. Queensland: Mt. Morgan (XI. 61), Cockburn (II. 62).

Zuphiinae

Pseudaptinus fulvus Cast.

Western Australia: Kenwick (1960-61.)

Pentagonicinae

Scopodes angulicollis Macl.

N. Queensland: Mt. Molloy (I. 62).

Pseudomorphinae

Adelotopus aphodioides Westw.

Victoria: Alberton (no date).

Adelotopus castaneus Cast.

Northern Territory: Katherine (XII. 57).

Sphallomorpha marginata Cast.

Western Australia: Spargoville (I. 61).

Castelnau caused considerable confusion when he described two very different species with the same name "*Silphomorpha marginata*" on successive pages (111 and 112) of his famous paper "Notes on Australian

Coleoptera**). The second species was renamed *castelnaui* by Reiche but the first has been omitted from the World Catalogue**). In effect, the name *Sphallomorpha marginata* Cast. must be applied to a species resembling the common *nitiduloides* Guér. but differing by its all-black pronotum and by the pale crescents not reaching the margins of the elytra.

Sphallomorpha castelnaui Reiche

New South Wales: Nyngan district (II. 62).

This is a small, dark species, with a pale sutural macula; it is closely related to the well-known *guttigera* Newm.

Sphallomorpha suturalis Germ.

Western Australia: Spargoville (I. 61), Kalgoorlie (1964).

*) Trans. Roy. Soc. Victoria, 8, 1868, pp. 95–225.

***) Coleopterorum Catalogus, 3, 1932–33, p. 1641–1642.